A B S T R A C T

The invention relates to sheet-shaped products processable by means of flow moulding comprising carbon fibres and a radical-curable resin as the matrix, the fibres being present in the form of mats consisting of fibres with lengths of more than 1 cm and the volume percentage of the fibres relative to the resin being less than 70%, and the fibres moving freely relative to one another in the mat during flow moulding, resulting in a net end product with a homogeneous fibre distribution. The invention also relates to a process for the production of sheet-shaped products by impregnating carbon fibre mats with a radical-curable resin and thickening that resin to a desired thickness, and a process for the production of moulded parts with a tensile modulus of > 20 GPa and a tensile strength of > 200 MPa.